

Oral presentation

Piglet castration and EU animal welfare legislation

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Introduction- EU animal welfare policies

Since the 1970's a growing body of rules concerning animal welfare and protection has evolved in the European Union (EU). The importance of this issue is manifested by the European Community (EC) Treaty's Protocol on Protection and Welfare of Animals which recognises animals as *sentient beings* and requires that in formulating and implementing the Community's agriculture, transport, internal market and research policies, the Community and the Member States shall pay *full regard* to the welfare requirements of animals.

Council Directive 98/58/EC [1] concerning the protection of animals kept for farming purposes requires that the owners or keepers of animals take all reasonable steps to ensure the welfare of animals under their care and to ensure that those animals are not caused any unnecessary pain, suffering or injury. However on the issue of mutilations this Directive was relatively silent, stating that pending the adoption of specific provisions relevant national provisions shall apply in accordance with the general rules of the Treaty.

Council of Europe and EU policies

Exceptionally, however, concerning piglet castration Directive 98/58/EC [1] acknowledged that specific rules were already in place and the afore-mentioned provision was cited "*without prejudice to Directive 91/630/EEC*". Council Directive 91/630/EEC [2] lays down minimum standards for the protection of pigs and it stated that, if practised, the castration of male pigs aged over four weeks may be carried out only under anaesthetic by a veterinarian or a person qualified in accordance with national legislation. This provision was in addition to a Council of

Europe Recommendation concerning pigs dating from 1986 [3](subsequently revised in 2004 [4]) and elaborated within the framework of the Council of Europe Standing Committee of the European Convention for the Protection of Animals kept for farming purposes. This Council of Europe Recommendation provided that procedures such as the castration of male pigs should be avoided where possible and shall be carried out by a veterinary surgeon or a skilled operator. It also specified that the castration of male pigs over eight weeks of age shall be performed under anaesthesia by a veterinary surgeon or any other person qualified in accordance with domestic legislation.

Council Directive 91/630/EEC [2] was amended by Commission Directive 2001/93/EC [5] which introduced, subject to certain exceptions, a general prohibition on all procedures intended as an intervention carried out for other than therapeutic or diagnostic purposes and resulting in damage to or the loss of a sensitive part of the body or the alteration of bone structure. One of the exceptions specifically provided for was the "*castration of male pigs by other means than tearing of tissues*" and it was stated that such procedures shall only be carried out by a veterinarian or a person trained or experienced in performing the applied techniques with appropriate means and under hygienic conditions. Deviating quite clearly from the Council of Europe Recommendation it stated that "*if castration...is practised after seventh day of life, it shall only be performed under anaesthetic and additional prolonged analgesia by a veterinarian*".

Council Directive 2001/88/EC [6] also provided an amendment to Council Directive 91/630/EEC [2] requir-

ing the Commission to submit to the Council a report on this issue, drawn up on the basis of an opinion from the Scientific Committee on Animal Health and Welfare. This report would take into account socio-economic and sanitary consequences, environmental effects, different climatic conditions and the development of techniques and systems of pig production and meat processing which would be likely to reduce the need to resort to surgical castration. It was also stated that "if need be, the report shall be accompanied by appropriate legislative proposals on the effects of different space allowances and floor types applicable to the welfare of weaners and rearing pigs".

More recent developments have included a revised Recommendation concerning pigs which the Council of Europe has elaborated, adopted by the Standing Committee on 2 December 2004 and which entered into force on 2 June 2005 [3]. This provides that the mutilation of pigs shall be generally prohibited and that measures shall be taken to avoid the need for such procedures in particular by changing inappropriate environmental factors or management systems by enriching the environment, or selecting appropriate breeds and strains of pigs. The Recommendation states that "exception to this general prohibition may be made by the competent authority only in respect of the following mutilations: castration of male pigs under 7 days without tearing of tissue. Castration of pigs over 7 days of age shall be performed under anaesthesia and prolonged analgesia and in accordance with national legislation the procedures shall be carried out by a veterinary surgeon or by a skilled operator and in accordance with national legislation".

Taking Switzerland as an example of additional legislative provisions on this issue the Swiss Federal Act on Animal Protection of March 9, 1978 (State as per July 1, 1995) and Swiss Animal Protection Ordinance of May 27, 1981 (State as per November 1, 1998) [7] provide that "persons with suitable experience are authorised to carry out the following operations without anaesthesia: castration of male pigs up to fourteen days of age". Therefore it is clear that in terms of legislative provisions and official guidance on the issue of piglet castration the picture is certainly evolving and will demand further actions.

The European Food Safety Authority report and opinion

In light of its obligation under Council Directive 2001/88/EC [6] to "submit to the Council a report, drawn up on the basis of an opinion from the Scientific Committee on Animal Health and Welfare (SCAHAW)" the European Commission sent on 6 August 2003 a request to the European Food Safety Authority (EFSA) – see note, to issue a scientific opinion on the welfare aspects of the castration of piglets. This EFSA report and opinion on piglet castration

was adopted in July 2004 [8], and its findings included that:

- "Approximately 80% (100 million) of the male piglets are castrated in the 25 EU Member States each year, however information on the castration of piglets from some countries is sparse.
- While it appears that low numbers of female pigs are castrated there is also a lack of information concerning the extent of, and techniques associated with castration of female pigs."

There is significant variation in the extent of the practice of piglet castration across the EU, with countries such as Ireland and the United Kingdom slaughtering pigs at a lower liveweight and not practising piglet castration. This trend also applies to a considerable extent in Spain and Portugal. However it seems that in a majority of EU Member States male pigs are systematically castrated. Although the practice of the castration of female pigs is not specifically foreseen in EU legislation EFSA reported that female pigs of certain breeds were castrated in localised regions of the EU, either to avoid management problems due to oestrus behaviour, to avoid pregnant females at slaughter or to improve growth performance.

On numerous points the EFSA report and opinion concluded that more data and research were required, for example:

- "There is a lack of quantitative information regarding the methods and procedures that are used for castrating the male and female pigs.
- There are no clear data demonstrating that pain perception related to surgical castration is lower in pigs younger than 7 days of age than in older ones.
- There is no information concerning the interaction between castration and other painful husbandry practices.
- There is no validated protocol for use of long-lasting analgesics which could be applied in commercial herds for reducing mid and long-term pain due to castration."

EFSA also reported that "some producers may carry out castration of piglets later than the first week of life, most often without any anaesthesia/analgesia" and questioned the feasibility and practicality of castrating male pigs by means other than tearing of the tissues. It was highlighted that the pain inflicted on piglets when castrated at various ages are scarce and the influence of the age at castration upon the immune system was unclear. The stress of handling the animals and actually administering anaesthetics/analgesics was also highlighted. EFSA also highlighted the

costs of approving and licensing veterinary drugs such as analgesics which may be very important for animal welfare but where the economic returns may not justify the licensing approval costs.

On boar taint current Community legislation (Directive 64/433/EEC [9]) provides that male carcasses over 80 kg may be allowed for human consumption provided that they bear a special mark and undergo treatment (i.e. processing) before entering the food chain. To this end Member States can recognise a test method and establish their acceptability criteria to ensure that carcasses with pronounced boar taint will be detected. However at present there is no harmonised method for detecting boar taint, but the United Kingdom has established the 'boiling test' for this purpose. In the absence of a harmonised method, there is evidence that 'on-line' detection methods of pronounced boar taint may vary among Member States. Concerning the issue of boar taint some of the EFSA conclusions were also quite stark:

- *"There is no standardised chemical and sensory method for measurement of chemical compounds contributing to boar taint.*
- *The sensory description of boar taint is not clear.*
- *Official criteria for inspectors to accept/reject limits for boar taint on slaughter lines are not established unequivocally.*
- *Carcass accept/reject criteria are not fully established with respect to consumer accept/reject limits especially in the different EU countries".*

Various non-surgical methods of castration were reviewed, including the local destruction of testicular tissue by chemical compounds (e.g. formaldehyde, acids and salts), down-regulation of the hypothalamic-pituitary-gonadal axis by the administration of exogenous hormones, or immuno-castration. However these methods have not been systematically evaluated in terms of consumer acceptability, animal welfare and product quality implications.

With regard to alternative methods of castration EFSA concluded that:

- *"Later surgical castration is very effective in reducing boar taint but is not practical.*
- *Local destruction of testicular tissue by chemicals, with the methods currently available, should not be used because of possible pain to the animal and continuing risk of boar taint.*

- *Exogenous hormones are effective in inhibiting sexual development. Very little is known on their efficiency for reducing boar taint.*

- *Immunocastration has been proven to be very effective in inhibiting sexual development and reducing boar taint. However a number of uncertainties are listed...*

- *No recommendation on the use of sexing of sperm and its insemination methods can be made at present."*

The EFSA report and opinion highlight to a large degree the necessity for future research on the extent of piglet castration and how it is performed, age-related pain perception mechanisms, the effects of castration on the immune system, the advantages and disadvantages of local anaesthesia, alternative methods of castration, the control of boar taint in meat etc.

Trying to fill the knowledge gaps

Faced with such scientific uncertainties or lack of knowledge it is incumbent upon the European Commission to seek to address such issues before proposing further legislative amendments or guidance. Already in December 2002 within the 6th Framework Research Programme the Commission had launched a call for applications for future research in this area with an indicative budget of 500,000 € foreseen. The specific task "Welfare implications of surgical castration in pigs" was published in a call on 17 December 2002 which had an overall indicative budget of 149.1 Million €. The indicative budget of area 1.4 "New and more environment friendly production methods to improve animal health and welfare including research on animal diseases such as foot and mouth disease, swine fever and development of marker vaccines" was 7 Million € and this area had 7 tasks, with task 6 addressing welfare implications of surgical castration in pigs. The stated objectives were to develop techniques and systems of pig production and meat processing which would be likely to reduce the need for surgical castration. An indicative budget of 0.5 Million € was foreseen for this task but only one project application was submitted for this task and upon evaluation it did not meet the thresholds for approval.

Nevertheless further research avenues are being actively investigated by the Commission, to address in particular knowledge gaps identified in the EFSA opinion and report. A prospective Community-funded research project plans to consider issues such as marker- or gene-assisted selective breeding as an alternative to the castration of pigs in order to reduce boar taint. Projects are also planned on improving the quality of pork and pork products for the consumer as well as a more specific call for the collection of data on the issue of piglet castration. Relevant issues

will include a review of current practices concerning the castration of male and female piglets in the EU and possible means of reducing the poor welfare implications of castration by improving castration methods, using techniques other than surgical castration and/or alternative management practices to reduce the risk of boar taint in meat.

Ongoing political interest and attention

Meanwhile at the Agriculture and Fisheries EU Council of Ministers Meeting of 21–22 December 2004 [10] Member States welcomed EFSA's work in presenting comprehensive reports of the most recent research findings in this area. EU Commissioner for Health and Consumer Protection Markos Kyprianou highlighted that existing EU legislation obliged farmers to avoid any unnecessary animal suffering and that a new call for research would be issued on this specific topic of piglet castration before the Commission further reports to the Council. The Council Presidency noted this announcement and the need for new detailed studies concerning alternative methods of castration of piglets.

Future perspectives

For many years there has been debate on the issue of mutilations performed on farm animals and the associated animal welfare implications. This is one of the main reasons why current EU animal welfare legislation highlights that piglet castration is an issue to be re-visited in the near future. However any future policy proposals need to be underpinned by a sound scientific basis and an assessment of the possible implications of any changes in existing legislative provisions. It is clear that consumer preferences and market trends also have a role to play here. For these reasons the European Commission is currently intent on promoting research and collecting further data on this issue so that its future report to Council will be as well-informed and soundly-based as possible, taking account also of initiatives by such international organisations as the Council of Europe. It is clear that a balance needs to be found between modern intensive farming practices, any associated animal health and welfare considerations and allowing animals to express their natural behavioural needs, while responding to consumers' clear demands and preferences.

Note

The SCAHAW held its final plenary meeting on 24–25 April 2003. Responsibility for the provision of scientific advice in this field has now been transferred to the Panel on Animal Health and Welfare of the European Food Safety Authority (EFSA)

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